



Title	Descriptions of some new Genera and Species from Japan, with a List of Species of the family Cochlidionidae
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Citation	INSECTA MATSUMURANA, 5(3): 101-116
Issue Date	1931-03
Doc URL	http://hdl.handle.net/2115/9212
Right	
Type	bulletin
Additional Information	



Instructions for use

DESCRIPTIONS OF SOME NEW GENERA AND SPECIES FROM JAPAN, WITH A LIST OF SPECIES OF THE FAMILY COCHLIDIONIDAE

By

PROF. DR. S. MATSUMURA

(With Plate II)

Though Mr. AKIRA KAWADA recently published a paper entitled "A List of Cochlidionid Moths in Japan, with Descriptions of two new Genera and six new Species" * in which 62 species under 27 genera are treated, and as I have still some more species in the collection of our Meseum, which I found to be new, and to some of them it is required new genera, so I would like to describe them in this occasion.

Also I added a list of the species belonging to this family which includes seventy-seven species and one form under thirty-four genera.

Narosoideus apicipennis n. sp. (Pl. II, fig. 16)

♀. Upperside—Fulvous yellow, head and thorax orange-yellow.

Primaries at the base, costa and apex fuscous brown; veins 9 and 10 infuscated; fringe at the base traversed by a paler line.

Secondaries concolorous with the primaries, at the costa infuscated, fringe somewhat paler, not traversed by a paler line at the base.

Underside—Nearly the same with the upperside, but along the discoidal veins of primaries densely fulvous scaled; secondaries orange-yellow, with brown hairy scales at the costa near the apex. Antennae and legs fulvous brown. Exp. 55 mm.

Hab.—Formosa; one female specimen was collected by the late T. TAKAMUKU at Horisha.

Rhamnopsis (n. g.) *arizanella* n. sp. (Pl. II, fig. 15)

♂. Somewhat allied to *Rhamnosa uniformis* SWINH.

Upperside—Primaries pale brown, a space at the costa towards the base, 2 discal patches and an oblique band from the outer edge of the excavation at the dorsum to the costa before the apex fuscous, fringe concolorous with the wing; secondaries fuscous brown, fringe paler especially near the anal angle,

* Jour. Imp. Agr. Exp. Sta. Tokyo, Vol. I, No. 3 (1930).

some of scales being tipped with yellow.

Underside—Fuscous gray, primaries at the discal region with an obscure fuscous patch; fringes of both wings at the bases traversed by each a paler line. Exp. 24 mm.

Hab.—Formosa; one male specimen was collected by M. MAKI at Arisan in July, 1914.

Rhamnopsis n. g.

Differs from *Rhamnosa* Fixs.* in the following points:

1. The stalk of veins $7+8+9$ to the primaries very long, somewhat longer than the stalk of $8+9$; upper discocellular nearly perpendicular, opening at very near the base of II, making a curved line with the middle discocellular, not acutely angled.
2. The stalk of $6+7$ to the secondaries much longer, being so long as the branches themselves.
3. Labial palpi robuster, the terminal joint naked, turned distinctly towards the innerside.

Genotype—*Rhamnopsis arizanella* MATS.

Neiraga (n. g.) **baibarana** n. sp. (Pl. II, fig. 1)

♂. Upperside—Primaries fuscous brown, a broad under-part of the medial vein as well as a broad stripe before the termen, both making right angles, ochraceous brown, mixing some fuscous scales, termen at the interspaces of the longitudinal veins paler; secondaries fuscous, fringe paler, at the base darker.

Underside—Silvery dark gray, at the costa of both wings darker. Palpi grayish, scattering fuscous scales on the lateral sides. Body fuscous, thoracal and abdominal crest being darker; underside and legs fulvous. Exp. 18 mm.

Hab.—Formosa; one male specimen was collected on the 20th, July, 1925, at Baibara by T. UCHIDA.

Neiraga n. g.

Closely allied to *Birthama* on account of venation, but differs from it in having the antenna bipectinated up to the tip in the male, costal margin to primaries nearly straight to the tip, termen from the apex to vein VI nearly perpendicular to the costa.

Genotype—*Neiraga baibarana* MATS.

* Fixsen described *Rhamnosa* in Mém. Rom. III, p. 400, 1892, as lacking spurs to tibia, but the type of this genus *R. angulata* Fixs. has one pair in the middle and 2 pairs of long spurs in the hind legs.

***Chibiraga* (n. g.) *nantonis* n. sp. (Pl. II, fig. 2)**

♂. Upperside—Primaries pale grayish brown, at the costa and termen fulvous brown, postmedial band fuscous, somewhat incurved and terminating at near the tornus, at the inner side being scattered with fuscous scales, discocellulars fuscous; secondaries yellowish brown, towards the tornus somewhat infuscated; fringes of both wings paler, infuscated in the middle at the tornus to secondaries. Underside—Paler than the upperside, at the costa, except apical $\frac{1}{4}$, brownish. Antennae and palpi reddish brown, body and legs nearly concolorous with the wings, coxa and femur of the anterior legs brownish seen from the front. Exp. 20 mm.

Hab.—Formosa; one male specimen was collected at Nanto by Prof. T. SHIRAKI.

***Chibiraga* n. g.**—As to the venation and antenna it resembles much *Idonauton* SWINH., but differs from it as follows:

♂. The stalk of 7+(8+9) less than a half length of the stalk of 8+9; palpi porrect, reaching beyond the tuft of vertex; antenna at the basal 2/3 bipectinated; hind tibia in the male with a pair of spurs at the apex.

Genotype—*Chibiraga nantonis* MATS.

***Nagodopsis* (n. g.) *shirakiana* n. sp. (Pl. II, fig. 6)**

Nagoda nigricans SHIRAKI (nec MOOR.), Taiwan Noji-Shikenjo Tokubetsu-Hokoku, viii, p. 394 (1913); MATSUMURA, Oyo-Konchugaku, p. 588 (1917); id., Dainippon Gaichu-Zensho, p. 563 (1920); ECKE, Lep. Cat. 32, p. 17 (1925); KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 256 (1930).

♂. Primaries grayish fuscous, subhyaline, at the base, costa, termen, dorsum as well as the fringe fuscous, the last at the base traversed by a black line, in the middle of suture with a small snow-white spot, just below this spot upon the vein Ib with the same coloured 2 specks.

Secondaries hyaline, at the costa, termen (narrowly) and dorsum (broadly) fuscous, veins yellow, with fuscous scales, fringe fuscous, at the base with a narrow paler line. Underside nearly similar to the upperside. Palpi pale testaceous, on its back fuscous. Antennae testaceous. Head and thorax densely covered with brownish tipped rough grayish scales. Abdomen covered with long fuscous scales and scaly hairs. Legs yellowish, with fuscous scales, the 2nd-4th hind tarsal joints whitish yellow and the same 5th joint fuscous scaled. Exp. 20 mm.

Hab.—Formosa; 2 male specimens were collected on the 20th of March, 1907, at Taihoku, by Prof. T. SHIRAKI.

***Nagodopsis* n. g.**—Closely allied to *Nagoda* MOOR., but differs from it as follows:

Antennae filiform, lamellate. Palpi upturned, reaching to the vertex, the apical joint nearly naked, turned inwardly, approaching to each other at the apex. Venation of both wings nearly the same to those of *Nagoda* MOOR., but the termen to secondaries nearly straight, at the apex and tornus with nearly the same angle. Hind tibia with a pair of long spurs, the outer one being much shorter than the inner one; hind tarsi much longer than the same tibia, the metatarsus being nearly as long as the following 4 joints taken together.

Genotype—*Nagodopsis shirakiana* MATS.

***Hypormoides* (n. g.) *okinawanus* n. sp. (Pl. II, fig. 7)**

♂. Upperside—Primaries fulvous gray, postmedial and submarginal bands fuscous, oblique, parallel to each other, the former being somewhat broader than the latter, at the margin somewhat infuscated, fringe concolorous with the wing, traversed at the base by a paler line; secondaries concolorous with the primaries. Underside—Nearly concolorous with upperside, being somewhat paler, scattered with brownish scales. Vertex, patagia and palpi brownish, body and legs brownish, at the tips of anterior and middle femora somewhat infuscated. Exp. 24 mm.

Hab.—Okinawa; one male specimen was collected by the late T. TAKAMUKU.

***Hypormoides* n. g.**—Closely allied to *Hypormix* Wk., but differs from it as follows:

♂. Antenna bipectinated up to the tip, gradually lessening its branch-length towards the apex; palpi porrect, nearly twice as long as the head, the second joint broad, clavate, the apical joint much shorter than the second, down-curved, somewhat conically pointed; primaries with 7,8 and 9 stalked, 10 from the upper angle of cell, 6 and 7 of secondaries with a long stalk; abdomen on the ventral side with short dense scaly hairs.

Genotype—*Hypormoides okinawanus* MATS.

***Contheyloides* (n. g.) *boninensis* n. sp. (Pl. II, fig. 23)**

♂. Upperside—Primaries fulvous brown, at the costa fuscous brown, at the terminal $\frac{1}{4}$ grayish testaceous; antemedial line (forked at the dorsum), medial line (wavy below the medial vein) and postmedial line (wavy) dark fuscous, the last one ending at the tornus, near the apex at the costa with a series of black spots; fringe fuscous, at the base traversed by a paler line, a discocellular spot testaceous, small but conspicuous; secondaries testaceous, silky, at the margin with a series of fuscous spots, fringe fuscous at the base and in the middle traversed by each a paler line. Underside—Fuscous in both

wings, at the apical $\frac{1}{4}$ fulvous, near the apex at the costa with an oblique fuscous patch, at the termen with a series of fuscous spots, fringe nearly the same with those of the upperside. Antenna testaceous. Body fuscous, mixing some fuscous scales. Legs and apico-ventral part of abdomen fulvous. Exp. 34 mm.

Hab.—Bonin Island; one male specimen was collected at Chichijima.

Contheyloides n. g.—Closely allied to *Contheyla* Wk., but the primaries longer, termen from the apex to vein 6 nearly perpendicular to the costa, secondaries with 6 and 7 widely separated at the base, abdomen much longer than the secondaries, at the apex being bilobed.

Genotype—*Contheyloides boninensis* MATS.

Demonarosa (n. g.) ***rosea*** n. sp. (Pl. II, fig. 24)

♂. Upperside—Primaries yellowish red, covered with some dense sulphur-yellow scales, scattering some obscure spot-like brownish scales on the terminal half, terminal line fulvous, somewhat spot-like; fringe fulvous at the apical half, at the base narrowly paler. Secondaries rosy red, fringe paler, at the apical half testaceous. Underside—Both wings rosy red, at the termen narrowly and the fringes yellowish. Head and thorax concolorous with the primaries and the abdomen with the secondaries. Legs yellowish, with some reddish scaly hairs. Exp. 32 mm.

Hab.—Formosa; one male specimen was collected at Heito (Kagi) by the late T. TAKAMUKU.

Demonarosa n. g.—Closely allied to *Narosa* Wk., but differs from it in having veins 6 and 7 to secondaries widely separated at base, the middle discocellular oblique to inner margin, making an obtuse angle with the upper discocellar, the lower discocellular nearly parallel to vein 6, 2 from the middle of cell.

Genotype—*Demonarosa rosea* MATS.

Cnidocampa rubriceps n. sp.

♂, ♀. Closely allied to *C. flavescens* Wk., but differs from it as follows: Frons red; primaries with a marginal band fulvous, fringe grayish testaceous, in the middle traversed by a broad fuscous band, the stalk of 8+9 much longer than the upper branch itself; secondaries concolorous with the primaries, at the base and the apical half being paler. Exp. ♂, ♀, 30–32 mm.

Hab.—Formosa; 3 (2 ♂ ♂, 1 ♀) specimens were collected in June and August by Messrs. S. SAITO and K. KIKUCHI at Baibara.

***Narosa formosana* MATS.**

Heterogenea formosana MAMSUMURA, Jour. Coll. Agr. Hokkaido Imp. Univ. XIX, p. 90, pl. V, f. 31 (1927).

Mr. A. KAWADA* thinks this as a synonym of *N. nigrisigna* WILEM., but it is quite impossible to compare with it, but if it be compared to, it has the following differences:

Primaries velvety white, at the costa, underside, fuscous, which extends from the base to $2/3$ of the wing; fringe pure white, mixing a few fuscous scales; a fuscous bar which runs from the middle of costa to vein 3 at the termen. Secondaries gray, fringe white.

***Iragaodes* n. g.**

Closely allied to *Phrixolepia* BUTL., but differs from it as follows:

Palpi upturned, the 3rd joint about a half as long as the 2nd, obtusely narrowed towards the apex, reaching the vertex; antennae setose, in both sexes finely short ciliated; primaries with the costa gently curved towards the apex, being obtusely conical (in *Ph. sericea* BUTL. acutely conical), at the termen gently curved, vein 6 arising from just below the upper angle, 7 and 8+9 arising from the apex of a small areola; secondaries with vein 8 anastomosing with 7, extending about basal $1/3$ of the cell, 3 and 4 separated as in *Phrixolepia***.

Genotype—*Phrixolepia nobilis* STGR.

Although A. KAWADA insists that this insect should be transferred to Noctuidae, but I think it may be better to treat this in Cochlidionidae.

***Iragaodes nobilis* STGR. f. *formosicola* n. f.**

♀. Differs from the typical specimens in having 2 distinct oblique fuscous bands to primaries, the interspace between these bands being grayish, the inner band being incurved near the costa, ending at vein 10. Exp. 31 mm.

Hab.—Formosa; one female specimen was collected by K. ASAKURA at Horisha.

Iragaodes albiceps* n. sp.**

♂, ♀. Head snow-white, with 2 fuscous spots at frons. Palpi white, at the back black, the 2nd joint at the apex and the 3rd scattered with fuscous scales. Antennae fuscous, the 1st and 2nd joints white. Thorax and abdomen

* Jour. Imp. Agr. Exp. Sta. Tokyo, Vol. I, No. 3, p. 253 (1930).

** A. KAWADA mentioned in Jour. Imp. Agr. Exp. Sta. Tokyo, Vol. I, No. 3, p. 235, 1930, that veins 3 and 4 arise from one point.

*** In this species veins 3 and 4 to secondaries arise from a point.

mouse-gray, with some pinkish shadow, patagia scattering fuscous scales. Primaries silky brownish gray, at the terminal $\frac{1}{3}$ chestnut-brown, with a silky luster; reniform oblong, encircled by a white line, postmedial line white, narrow, broadly excurred beyond the reniform and geniculated just below the reniform; antemedial line white, distinct below the medial vein before the hind margin, being incurved at the suture; submarginal line fuscous, wavy, terminating at the tornus, lined with a large round reddish brown patch outwardly.

Secondaries dark gray, towards the termen fuscous; fringe fuscous, at the apical half grayish. Underside of primaries fuscous, at the costa near the apex with a long testaceous gray patch; secondaries gray, at the termen with a large fuscous blotch. Exp. 37 mm.

Hab.—Formosa; 2 (1 ♂, 1 ♀) specimens were collected on the 20th, April, 1928, at Arisan by the author.

***Thosea suigensis* n. sp. (Pl. II, fig. 14)**

♂. Primaries dark gray. Primaries with 3 fuscous bands, the basal one triangular, being acute towards the costa, the middle one fusiform, becoming much narrower towards both margins and strongly oblique, the terminal one straight, ending at the tornus, at the termen somewhat infuscated. Secondaries fuscous. Fringes of both wings paler, underside somewhat darker than on the upperside. Abdomen with some fulvous shadow, at the sides with some fuscous scales. Exp. 25 mm.

Hab.—Korea; 3 male specimens were collected in May at Suigen by Dr. H. OKAMOTO.

***Thosea nitobeana* n. sp. (Pl. II, fig. 4)**

♂. Closely allied to *T. suigensis* MATS., but differs from it as follows: Primaries grayish, with fuscous antemedial and postmedial bands, the former being broken and far not reaching to the costa, the latter somewhat narrower, being angled at veins 2 and 5, near the termen with a semicircular fuscous ring. Exp. 20 mm.

Hab.—Honshu; one male specimen was collected at Aomori by the late I. NITOBÉ.

***Thosea baibarana* n. sp. (Pl. II, fig. 18)**

Allied to *T. postornata* HMPSON, but differs from it as follows:

♀. Upperside—Primaries dark, the oblique band more obliquely terminating at far beyond the middle of costa; postmedial band nearly straight, terminating at before the tornus, lined outwardly with a cuneate pale brownish patch which changes colour according to light; termen and costa at apex grayish.

Underside—Dark brown, at the tornus of primaries with a paler patch, fringe traversed by a paler line in the middle. Antenna from the middle to the apex more deeply serrated. Exp. 56 mm.

Hab.—Formosa; one female specimen was collected at Baibara (Horisha) on the 15th, June, 1926, by S. SAITO and K. KIKUCHI. The author captured one ♀ specimen of *T. postornata* HMPSON at Gyochi and received numerous specimens from Mr. K. ONO in Borneo, which is reported to be very injurious to Cocoa-palm.

***Microcampia suzukii* n. sp. (Pl. II, fig. 5)**

♂. Antennae brownish. Head, thorax and abdomen whitish, at the base of each abdominal segment and the anal tuft being slightly tinged with yellowish. Primaries white, clouded with dark yellow, leaving the base, antemedial, medial and postmedial lines which are paler, the lines being moderately undulated at the dorsal area; two black dots in the middle of the wing.

Secondaries fuscous, with no marking. Fringes to both wings pale yellowish. Underside—Primaries fuscous, costa yellowish, outer and dorsal areas as well as the secondaries pale yellowish. Legs and the abdomen beneath whitish. Exp. 20 mm.

Hab.—Honshiu; a single male specimen was collected at Mt. Oye on the 17th of August, 1917, by M. SUZUKI, and two males (one of which is the type) were obtained at Chichibu on the 30th of July, 1919, by S. HIRAYAMA.

This comes near to *M. uncula* STGR., but easily be distinguished in having two black dots in the middle to the primaries instead of a broad blackish medial band.

***Microcampia coreana* n. sp. (Pl. II, fig. 3)**

Differs from *M. suzukii* MATS. in the following points:

1. Primaries suffused with blackish scales at the outside of cell.
2. Primaries with some blackish spots in and below the dark-suffused part.
3. Primaries with the antemedial and medial lines broader, the postmedial line being almost obsolete.
4. Smaller in size. Expanse of wings 15 mm.

Hab.—Korea; a single male specimen was collected at Shakoji on the 9th of August, by Y. HASEGAWA.

A List of Cochlidionid-species from Japan

***Susica formosana* WLMN. (*Taiwan-usu-iraga*)**

Susica formosana WILEMAN, Eatom. xliv, p. 151 (1911).

Hab.—Formosa.

Sucica fusca MATS. (*Usuguro-iraga*)

Susica fusca MATSUMURA, Thous. Ins. Jap. Suppl. iii, p. 80, pl. xxxvi, f. 8 (1911).

Hab.—Formosa.

Susica pallida Wk. (*Suji-iraga*)

Susica pallida WALKER, Cat. Lep. Het. B. M. v, p. 1114 (1855); MATSUMURA, Thous. Ins. Jap. Suppl. iii, p. 78, pl. xxxvi, f. 5 (1911).

Hab.—Japan, Formosa, China, Philippines, Sumatra, Moulmein, India.

Phrixolepia sericea EUTL. (*Aka-iraga*)

Phrixolepia sericea BUTLER, Ann. Mag. Nat. Hist. (4) xx, p. 476 (1877).

Hab.—Japan, Formosa, Ussuri, Amur, Askold, Manchuria.

Iragaodes albiceps MATS. (*Shirozu-iraga*)

Iragaodes albiceps MATSUMURA, v. p. 106.

Hab.—Formosa.

Iragaodes nobilis STGR. (*Mayeki-iraga*) (Pl. II, fig. 26)

Heterogenea nobilis STAUDINGER, Rom. Mém. iii, p. 196, pl. 11, f. 8 (1887).

So far as I am aware, this species has hitherto been unrecorded from this country. I have here the following three specimens in our Museum: 1 ♂, Nikko, 25, vi, 1919, S. HIRAYAMA; 1 ♀, Oyeyama, 18, vi, 1917, M. SUZUKI; 1 ♀, ?, M. SUZUKI.

Hab.—Japan, Amur.

Iragaodes nobilis STGR. f. **formosicola** MATS.

Iragaodes nobilis STGR. f. *formosicola* MATSUMURA, v. p. 106.

Hab.—Formosa.

Oxyplax ochracea MOOR. (*Hasuobi-iraga*) (Pl. II, fig. 9)

Aphendala ochracea MOORE, Lep. Ceyl. ii, p. 129, pl. 129, ff. 3, 3a (1883); KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 236, pl. xxvi, f. 2. t.-f. 4 (1930) (*Oxyplax*).

Hab.—Formosa, Java, Ceylon, India.

Thosea ? arizana WLMN. (*Kurosuiji-iraga*)

Thosea ? arizana WILEMAN, Entom. xlvi, p. 98 (1916).

Hab.—Formosa.

Thosea baibarana MATS. (*Baibara-hasuji-iraga*)

Thosea baibarana MATSUMURA, v. p. 107, Pl. II, fig. 18.

Hab.—Formosa.

Thosea bicolor SHIRAKI (*Atobane-iraga*)

Thosea bicolor SHIRAKI, Taiwan Noji-Shikenjo Tokubetsu-Hokoku, viii, p. 495 (1913).

Hab.—Formosa.

Thosea cana Wk. (*Neguro-iraga*) (Pl. II, fig. 11)

Parasa cana WALKER, Cat. Lep. Het. B. M. xxxii, p. 484 (1865).

Natada basifusca KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 238, pl. xxvi, f. 3, t.-f. 5 (1930).

Hab.—Formosa.

Thosea castanea WLMN. (*Kuriiro-iraga*) (Pl. II, fig. 19)

Thosea castanea WILEMAN, Entom. xliv, p. 204 (1911).

Hab.—Formosa.

Thosea ? conspersa BUTL. (*Kurofu-iraga*)

Aphendala conspersa BUTLER, Proc. Zool. Soc. Lond. p. 673 (1880); KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 240 (1930) (*Thosea ?*).

Hab.—Formosa.

Thosea nitobeana MATS. (*Nitobe-iraga*)

Thosea nitobeana MATSUMURA, v. p. 107, Pl. II, fig. 4.

Hab.—Japan.

Thosea postornata HMPSON. (*Hasuji-iraga*)

Thosea postornata HAMPSON, Jour. Bomb. Nat. Hist. Soc. xiii, p. 231 (1900), KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 240 (1930).

Birthama juncta MATSUMURA (nec Wk.), Thous. Ins. Jap. Suppl. iii, p. 76, pl. xxxvi, f. 2 (1911).
Contheyla brunnea SHIRAKI, Taiwan Noji-Shikenjo Tokubetsu-Hokoku, viii, p. 404 (1913).

Hab.—Formosa, China, India.

Thosea rufa WLMN. (*Kabairo-iraga*) (Pl. II, fig. 20)

Thosea rufa WILEMAN, Entom. xlviii, p. 19 (1915).

Hab.—Formosa.

Thosea sinensis Wk. (*Kuroten-iraga*)

Anzabe sinensis WALKER, Cat. Lep. Het. B. M. v, p. 1093 (1855); LEECH, Proc. Zool. Soc. Lond. p. 611 (1888).

Susica taiwana SHIRAKI, Taiwan Noji-Shikenjo Tokubetsu-Hokoku, viii, pp. 399, 401 (1913).

Hab.—Formosa, Korea, China, Borneo, Manila, Java, Pegu, Cachar.

Thosea suigensis MATS. (*Suigen-iraga*)

Thosea suigensis MATSUMURA, v. p. 107, Pl. II, fig. 14.

Hab.—Korea.

Thosea taiwana WLMN. (*Kanshi-iraga*)

Thosea taiwana WILEMAN, Entom. xlix, p. 98 (1916).

Hab.—Formosa.

Chibiraga nantonis MATS. (*Chibi-iraga*)

Chibiraga nantonis MATSUMURA, v. p. 103, Pl. II, fig. 2.

Hab.—Formosa.

Spatulifimbria castaneiceps HMPSON. (*Hime-iraga*)

Spatulifimbria castaneiceps HAMPSON, Faun. Brit. Ind. Moths, i, p. 391 (1892); KAWADA, Jour.

Imp. Agr. Exp. Sta. Tokyo, I (3), p. 241 (1930).

Hab.—Formosa, Ceylon.

Iraga rugosa WLMN. (*Shakudo-iraga*)

Tetraphleps? rugosa WILEMAN, Entom. xliv, p. 205 (1911).

Hab.—Formosa.

Orthocraspeda trima MOOR. (*Obi-iraga*) (Pl. II, fig. 21)

Parasa trima MOORE, Cat. Lep. E. I. C. Mus. ii, p. 416, pl. 11a, ff. 13, 13a (1859).

Thoseoides fasciata SHIRAKI, Taiwan Noji-Shikenjo Tokubetsu-Hokoku viii, p. 388 (1913).

Hab.—Formosa, Philippines, Java, Sumatra, E. Pegu.

Nagodopsis shirakiana MATS. (*Mikan-iraga*)

Nagoda nigricans SHIRAKI (nec MOOR.), Taiwan Noji-Shikenjo Tokubetsu-Hokoku viii, p. 394 (1913).

Nagodopsis shirakiana MATSUMURA, v. p. 103, Pl. II, fig. 6.

Hab.—Formosa.

Neiraga baibarana MATS. (*Baibara-kuro-iraga*)

Neiraga baibarana MATSUMURA, v. p. 102, Pl. II, fig. 1.

Hab.—Formosa.

Ceratonema butleri KAWADA (*Usutobi-iraga*)

Aphendala sericea BUTLER, Trans. Ent. Soc. Lond. p. 595 (1881) (praeocc.).

Ceratonema butleri KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 233, pl. xxvi, f. 1, t.-f. 2 (1930).

Hab.—Japan.

Althonarosa horisyaensis KAWADA (*Kuroten-shiro-iraga*)

Althonarosa horisyaensis KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 251, pl. xxvi, f. 12, t.-f. 14 (1930).

Hab.—Formosa.

Demonarosa rosea MATS. (*Shitabeni-iraga*)

Eunarosa rosea MATSUMURA, v. p. 105, Pl. II, fig. 24.

Hab.—Formosa.

Narosa baibarana MATS. (*Baibara-iraga*)

Narosa baibarana MATSUMURA, Jour. Coll. Agr. Hokkaido Imp. Univ. xix, p. 88, pl. v, f. 30 (1927).

Hab.—Formosa.

Narosa corusca WLMN. (*Kabafu-shiro-iraga*)*Narosa corusca* WILEMAN, Entom. xliv, p. 205 (1911).*Narosa kanshireana* MATSUMURA, Jour. Coll. Agr. Hokkaido Imp. Univ. xix, p. 87, pl. v, f. 24 (1927).

Hab.—Formosa.

Narosa culta BUTL. (*Aosuji-iraga*)*Narosa culta* BUTLER, Ann. Mag. Nat. Hist. (5) iv, p. 356 (1879).

Hab.—Japan, Korea.

Narosa edoensis KAWADA (*Hime-shiro-iraga*)*Narosa edoensis* KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 252, pl. xxvi, f. 11 (1930).

Hab.—Japan, China.

Narosa formosana MATS. (*Taiwan-kiiro-iraga*)*Heterogenea formosana* MATSUMURA, Jour. Coll. Agr. Hokkaido Imp. Univ. xix, p. 95, pl. v, f. 31 (1927).

Hab.—Formosa.

Narosa ishidae MATS. (*Ishida-iraga*) (Pl. II, fig. 10)*Narosa ishidae* MATSUMURA, Jour. Coll. Agr. Hokkaido Imp. Univ. xix, p. 87 (1927).

Hab.—Formosa.

Narosa nigrisigna WLMN. (*Kurosucci-shiro-iraga*) (Pl. II, fig. 12)*Narosa nigrisigna* WILEMAN, Entom. xliv, p. 204 (1911).*Narosa (Penicillonarosa) penicillata* STRAND, Arch. f. Naturg. 82, A, 3, p. 142 (1916).

Hab.—Formosa.

Narosa nitobei SHIRAKI (*Kenashi-shiro-iraga*)*Narosa nitobei* SHIRAKI, Taiwan Noji-Shikenjo Tokubetsu-Hokoku, viii, p. 391 (1913).

Hab.—Formosa.

Narosa obscura WLMN. (*Usuba-chairo-iraga*)*Narosa obscura* WILEMAN, Entom. xlviii, p. 18 (1915).

Hab.—Formosa.

Narosa shinshana MATS. (*Usuki-iraga*)*Narosa shinshana* MATSUMURA, Jour. Coll. Agr. Hokkaido Imp. Univ. xix, p. 89, pl. v, f. 27 (1927).

Hab.—Formosa, Riukiu.

Narosa takamukui MATS. (*Takamuku-iraga*)*Narosa takamukui* MATSUMURA, Jour. Coll. Agr. Hokkaido Imp. Univ. xix, p. 88, pl. v, f. 25 (1927).

Hab.—Formosa.

***Contheyloides boninensis* MATS. (*Ogasawara-iraga*)**

Contheyloides boninensis MATSUMURA, v. p. 104, pl. II, fig. 23.

Hab.—Bonin Islands.

***Narosoideus apicipennis* MATS. (*Tsumaguro-iraga*)**

Narosoideus apicipennis MATSUMURA, v. p. 101, pl. II, fig. 16.

Hab.—Formosa.

***Narosoideus flavidorsalis* STGR. (*Nashi-iraga*)**

Heterogenea flavidorsalis STAUDINGER, Rom. Mém. iii, p. 195, pl. xi, f. 7 (1887); KAWADA, Jour.

Imp. Agr. Exp. Sta. Tokyo, I (3), p. 244 (1930) (*Narosoideus*).

Limacodes ? sp. PRYER, Trans. Asiat. Soc. Jap. xii, p. 41 (1884).

Miresa inornata BUTLER (nec Wk.), Cist. Ent. iii, p. 120 (1885); LEECH, Proc. Zool. Soc. Lond. p. 611 (1888).

Hab.—Japan, Korea, China, Amur, Ussuri.

***Narosoideus ? fuscicostalis* FIXS. (*Mayeguro-iraga*)**

Heterogenea (Miresa) flavidorsalis var. *fuscicostalis* FIXSEN, Rom. Mém. iii, p. 337, pl. xv, f. 10 (1887); KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 245 (1930) (*Narosoideus ?*).

Hab.—Korea, Amur.

***Narosoideus inornatus* Wk. (*Haobi-iraga*)**

Miresa inornata WALKER, Cat. Lep. Het. B. M. v, p. 1125 (1855).

Miresa vulpina WILEMAN, Entom. xliv, p. 206 (1911).

Narosoideus formosanus MATSUMURA, Thous. Ins. Jap. Suppl. iii, p. 75, pl. xxxvi, f. 1 (1911).

Narosoideus vulpinus ab. *aurisoma* MATSUMURA, Jour. Coll. Agr. Hokkaido Imp. Univ. xix, p. 86, pl. v, f. 28 (1927).

Hab.—Formosa, China, Java, Bengal, Kunawar, India.

***Altha castaneipars* MOOR. (*Akamon-iraga*)**

Miresa castaneipars MOORE, Proc. Zool. Soc. Lond. p. 819 (1865); KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 250 (1930) (*Altha*).

Hab.—Formosa, Java, Singapore, India.

***Altha melanopsis* STRAND (*O-shiro-iraga*)**

Altha melanopsis STRAND, Suppl. Entom. 4, p. 8 (1915).

Hab.—Formosa.

***Altha subrosea* WLMN. (*Beni-iraga*) (Pl. II, fig. 22)**

Altha subrosea WILEMAN, Entom. xlviii, p. 19 (1915).

Hab.—Formosa.

***Cnidocampa flavescens* Wk. (*Nami-iraga*)**

Monema flavescens WALKER, Cat. Lep. Het. B. M. v, p. 1112 (1885); BUTLER, Ill. Typ. Sp. B. M. ii, p. 14, pl. xxv, f. 5 (1878).

Hab.—Japan, Formosa, Korea, China, Manchuria, Ussuri, Amur.

Cnidocampa rubriceps MATS. (*Akazu-iraga*)*Cnidocampa rubriceps* MATSUMURA, v. p. 105.

Hab.—Formosa.

Microleon longipalpis BUTL. (*Tengu-iraga*) (Pl. II, fig. 13)*Microleon longipalpis* BUTLER, Cist. Ent. iii, p. 121 (1885).

Hab.—Japan, Korea.

Microleon ? rubricundula WLMN. (*Kurofu-aka-iraga*)*Microleon ? rubricundula* WILEMAN, Trans. Ent. Soc. Lond. p. 349, pl. xxx, f. 14 (1911).

Hab.—Japan.

Hypormoides okinawanus MATS. (*Okinawa-iraga*)*Hypormoides okinawanus* MATSUMURA, v. p. 104, pl. II, fig. 7.

Hab.—Okinawa.

Belippa horrida WK. (*Tsumajiro-iraga*) (Pl. II, fig. 28)*Belippa horrida* WALKER, Cat. Lep. Het. B. M. xxxii, p. 509 (1865).*Cherometta formosensis* KAWADA, Jour. Imp. Agr. Exp. Sta. I (3), p. 257, pl. xxvi, f. 9. t.-f. 21 (1930).

Hab.—Formosa, S. China.

Scopelodes contracta WK. (*Hime-kuro-iraga*) (Pl. II, fig. 17)*Scopelodes contracta* WALKER, Cat. Lep. Het. B. M. v, p. 1105 (1855); LEECH, Trans. Ent. Soc. Lond. p. 100 (1899).

Hab.—Japan, China, India.

Scopelodes venosa WK. (*Kuro-iraga*)*Scopelodes venosa* WALKER, Cat. Lep. Het. B. M. v, p. 1105 (1855).*Scopelodes ursina* (BUTL.) LEECH, Proc. Zool. Soc. Lond. p. 611 (1888).

Hab.—Japan, China, India, Ceylon.

Parasa bicolor WK. (*Midori-iraga*)*Neacea bicolor* WALKER, Cat. Lep. Het. B. M. v, p. 1142 (1855).*Monema virescens* MATSUMURA, Thous. Ins. Jap. Suppl. iii, p. 77, pl. xxxvi, f. 4 (1911).

Hab.—Formosa, China, Java, Burma, India.

Parasa consocia WK. (*Ao-iraga*)*Parasa consocia* WALKER, Cat. Lep. Het. B. M. xxxii, p. 484 (1865); LEECH, Proc. Zool. Soc. Lond. p. 610 (1888).

Hab.—Japan, Korea, Formosa, Manchuria, China, Ussuri, Amur, Askold.

Parasa hilarata STGR. (*Kishita-ao-iraga*)*Heterogenea hilarata* STAUDINGER, Rom. Mém. iii, p. 198 (1887).*Parasa hilaris* LEECH (nec WESTW.), Proc. Zool. Soc. Lond. p. 610 (1888) part.

Hab.—Japan, Formosa, China, Ussuri.

Parasa lepida CRAM. (*Hiroheri-ao-iraga*)

Phalaena (Noctua) lepida CRAMER, Pap. Exot. ii, p. 50, pl. cxxx, f. E (1777); KAWADA, Jour.

Imp. Agr. Exp. Sta. Tokyo, I (3), p. 248 (1930) (*Parasa*).

Hab.—Japan, China, Java, Sumatra, Ceylon, India.

Parasa pastoralis BUTL. (*O-ao-iraga*)

Parasa pastoralis BUTLER, Ann. Mag. Nat. Hist. (5) vi, p. 63 (1820); KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 249 (1930).

Hab.—Formosa, Java, India.

Parasa sinica MOOR. (*Kuroshita-ao-iraga*)

Parasa sinica MOORE, Ann. Mag. Nat. Hist. (4) xx, p. 93 (1877); LEECH, Trans. Ent. Soc. Lond. p. 106 (1899).

Hab.—Japan, Korea, China, Amur.

Parasa shirakii KAWADA (*Seguro-ao-iraga*)

Parasa shirakii KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 249, pl. xxvi, f. 7 (1930).

Hab.—Formosa.

Miresa fulgida WLMN. (*Gimboshii-iraga*)

Miresa fulgida WILEMAN, Entom. xlili, p. 192 (1910).

Miresa bracteata MATSUMURA (nec BUTL.), Thous. Ins. Jap. Suppl. iii, p. 79, pl. xxxvi, f. 6 (1911).

Miresa bracteata BUTL. var. *orientalis* STRAND, Suppl. Entom. 4, p. 6 (1915).

Miresa bracteata BUTL. ab. *kagoshimensis* STRAND, l. c. p. 7 (1915).

Hab.—Japan, Formosa.

Miresa muramatsui KAWADA (*Tobihiro-iraga*)

Miresa muramatsui KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 246, pl. xxvi, f. 6 (1930).

Hab.—Korea.

Cania bilinea WK. (*Futasuji-iraga*) (Pl. II, fig. 25)

Neaera bilinea WALKER, Cat. Lep. Het. B. M. v, p. 1142 (1855); SHIRAKI, Taiwan Noji-Shikenjo Tokubetsu-Hokoku, viii, p. 397 (1913) (*Cania*).

Hab.—Formosa, China, Java, Sumatra, India.

Natada conjuncta WK. (*Taiwan-iraga*)

Limacodes ? conjuncta WALKER, Cat. Lep. Het. B. M. v, p. 1150 (1855); FIXSEN, Rom. Mém. iii, p. 338, pl. xv, f. 9 (1887) (*Heterogenea*).

Hab.—Japan, Formosa, Korea, China, Amur, India.

Natada furva WLMN. (*Taiwan-usuguro-iraga*)

Natada furva WILEMAN, Entom. xliv, p. 205 (1911).

Hab.—Formosa.

Rhamnosa angulata FIXS. (*Eguri-iraga*) (Pl. II, fig. 27)

Rhamnosa ? angulata FIXSEN, Rom. Mém. iii, p. 339, pl. xv, f. 1 (1887).

Hab.—Korea.

Rhamnosa uniformis SWINH. (*Muji-iraga*)

Narosa uniformis SWINHOE, Trans. Ent. Soc. Lond. p. 7 (1895); KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 244 (1930) (*Rhamnosa*).

Caniodes takamukui MATSUMURA, Jour. Coll. Agr. Hokkaido Imp. Univ. xix, p. 91, pl. v, f. 29 (1927).

Hab.—Formosa, India.

Rhamnopsis arizanella MATS. (*Arisan-hasuobi-iraga*)

Rhamnopsis arizanella MATSUMURA, v. p. 101, pl. II, fig. 15.

Hab.—Formosa.

Heterogenea asella SCHIFF. et DEN. (*Kagiba-iraga*)

Bombyx asella SCHIFFERMÜLLER et DENIS, Verz. Schmett. Wien. p. 65 (1775); WILEMAN, Trans. Ent. Soc. Lond. p. 350 (1911) (*Heterogenea*).

Hab.—Japan, Korea, Ussuri, Europe, America.

Cochlidion dentatus OBERTH. (*Murasaki-iraga*)

Limacodes dentatus OBERTHÜR, Diag. Lep. Askold. p. 8 (1879); LEECH, Trans. Ent. Soc. Lond. p. 108 (1899) (*Heterogenea*?).

Hab.—Japan, Korea, China, Amur, Askold, Ussuri.

Microcampia coreana MATS. (*Chosen-madara-iraga*)

Microcampia coreana MATSUMURA, v. p. 108, Pl. II, fig. 3.

Hab.—Korea.

Microcampia fulgens LEECH (*Usu-madara-iraga*)

Heterogenea fulgens LEECH, Proc. Zool. Soc. Lond. p. 609 (1888); KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 256 (1930) (*Microcampia*).

Hab.—Japan, Korea, China.

Microcampia suzukii MATS. (*Suzuki-madara-iraga*)

Microcampia suzukii MATSUMURA, v. p. 108, Pl. II, fig. 5.

Hab.—Japan.

Microcampia uncula STGR. (*Madara-iraga*) (Pl. II, fig. 8)

Heterogenea uncula STAUDINGER, Rom. Mém. iii, p. 197, pl. xi, f. 9 (1887); LEECH, Proc. Zool. Soc. Lond. p. 609 (1888); KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 256 (1930) (*Microcampia*).

Hab.—Japan, China, Amur, Ussuri.

Mahanta quadrilinea MOOR. (*O-iraga*)

Mahanta quadrilinea MOORE, Lep. Atk. p. 78, pl. iii, f. 20 (1879); KAWADA, Jour. Imp. Agr. Exp. Sta. Tokyo, I (3), p. 255, t.-f. 19 (1930).

Hab.—Formosa, India.